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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|-----------------|------------------|----------------------|---------------------|------------------|--|
| 10/017,842 | 10/23/2001 | Claus Erdmann Furst | 04590-000706 9627 | | |
| 30593 | 7590 10/26/2005 | | EXAMINER | | |
| HARNESS, | DICKEY & PIERCE | TAYLOR, BARRY W | | | |
| P.O. BOX 89 | | | ART UNIT | PAPER NUMBER | |
| RESTON, V | RESTON, VA 20195 | | 2643 | | |
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DATE MAILED: 10/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief

| Application No. | Applicant(s) | | |
|-----------------|----------------------|--|--|
| 10/017,842 | FURST, CLAUS ERDMANN | | |
| Examiner | Art Unit | | |
| Barry W. Taylor | 2643 | | |

| | Barry W. Taylor | 2643 | |
|---|--|---|---------------------------------------|
| The MAILING DATE of this communication appe | ars on the cover sheet with the d | correspondence add | ress |
| THE REPLY FILED <u>16 September 2005</u> FAILS TO PLACE THI | | | |
| The reply was filed after a final rejection, but prior to or of this application, applicant must timely file one of the folloplaces the application in condition for allowance; (2) a No. (3) a Request for Continued Examination (RCE) in completioning time periods: | n the same day as filing a Notice o wing replies: (1) an amendment, a otice of Appeal (with appeal fee) in | f Appeal. To avoid ab ffidavit, or other evide compliance with 37 C | ence, which CFR 41.31; or |
| a) The period for reply expires <u>3</u> months from the mailing date of | the final rejection. | | |
| b) The period for reply expires on: (1) the mailing date of this Adviserent, however, will the statutory period for reply expire later that Examiner Note: If box 1 is checked, check either box (a) or (b). MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f) | an SIX MONTHS from the mailing date of ONLY CHECK BOX (b) WHEN THE FI | f the final rejection. RST REPLY WAS FILEI | O WITHIN TWO |
| Extensions of time may be obtained under 37 CFR 1.136(a). The date on been filed is the date for purposes of determining the period of extension a CFR 1.17(a) is calculated from: (1) the expiration date of the shortened stabove, if checked. Any reply received by the Office later than three months earned patent term adjustment. See 37 CFR 1.704(b). NOTICE OF APPEAL | nd the corresponding amount of the fee. tutory period for reply originally set in the | The appropriate extension final Office action; or (2) | n fee under 37 as set forth in (b) |
| 2. The Notice of Appeal was filed on A brief in compof filing the Notice of Appeal (37 CFR 41.37(a)), or any expine a Notice of Appeal has been filed, any reply must be AMENDMENTS | xtension thereof (37 CFR 41.37(e) |), to avoid dismissal o | of the appeal. |
| 3. X The proposed amendment(s) filed after a final rejection, | but prior to the date of filing a brie | f, will not be entered t | pecause |
| (a) They raise new issues that would require further co | nsideration and/or search (see NO | | |
| (b) They raise the issue of new matter (see NOTE belo (c) They are not deemed to place the application in bet | • • | aducina or simplifyina | the issues for |
| appeal; and/or | ter form for appear by materially re | educing or simplifying | the issues ioi |
| (d) They present additional claims without canceling a NOTE: (See 37 CFR 1.116 and 41.33(a)). | | jected claims. | |
| NOTE: (See 37 CFR 1.116 and 41.33(a)). The amendments are not in compliance with 37 CFR 1.1 | | ampliant Amandment | (DTOL 324) |
| 5. Applicant's reply has overcome the following rejection(s) | | omphant Amendment | (FTOL-324). |
| 6. Newly proposed or amended claim(s) would be a | | , timely filed amendm | ent canceling |
| the non-allowable claim(s). | • | | |
| 7. For purposes of appeal, the proposed amendment(s): a) how the new or amended claims would be rejected is protent the status of the claim(s) is (or will be) as follows: | | ill be entered and an | explanation of |
| Claim(s) allowed: | | | |
| Claim(s) objected to: | | | |
| Claim(s) rejected: <u>1-15</u> . | | • | |
| Claim(s) withdrawn from consideration: AFFIDAVIT OR OTHER EVIDENCE | | | |
| B. The affidavit or other evidence filed after a final action, but because applicant failed to provide a showing of good an and was not earlier presented. See 37 CFR 1.116(e). | | | |
| The affidavit or other evidence filed after the date of filing entered because the affidavit or other evidence failed to o showing a good and sufficient reasons why it is necessar | vercome all rejections under appe | al and/or appellant fa | ils to provide a |
| 10. The affidavit or other evidence is entered. An explanatio | | , , , | • |
| REQUEST FOR RECONSIDERATION/OTHER | t door NOT place the application i | | b |
| 11. The request for reconsideration has been considered bu See Continuation Sheet. | | • | nce decause; |
| 12. Note the attached Information Disclosure Statement(s).13. Other: | (PTO/SB/08 or PTO-1449) Paper | No(s) | |
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Continuation Sheet (PTO-303)

a) Applicants argue that the single volume control input to the DSP 670 of Rasmusson is the only input (see bottom of page 7, paper dated 9/16/05).

The Examiner notes that Rasmusson generally shows volume control 615 but is not necessarily limited to only one volume control. For example, Rasmusson discloses that both control button 615 and voice-activated inputs used to control volume.

Furthermore, Rasmusson teaches that a set of switches may be used (col. 6 line 1) which clearly requires more than one control input to DSP. However, Rasmusson is silent with respect to using multiplexing for volume control when two or more switches used. Realizing this and the fact that Ostman teaches A/D and D/A converters are effectively utilized in a mobile phone (i.e. mobile unit), for example, by multiplexing the signals before the conversion (abstract, col. 1 lines 1-4) in both time and frequency domain. Ostman discloses that prior art must use a large amount of circuitry for both the transmit and receive path (col. 1 line 57 – col. 2 line 15) which is what Rasmusson figure 6 shows. Ostman inventive concept is to use MULTIPLEXING (col. 2 lines 23-46) so that same components (i.e. use same A/D and D/A converters) may be used thereby saving on size and money.

b) Next, Applicants argue that Malmi discloses only a single user operable volume control (see bottom of page 8, paper dated 9/16/05).

The Examiner notes that Rasmusson discloses that switches may be used instead of single input, which obviously provides DSP with more than one input for volume control. The Examiner notes that Applicants independent claims do not mention

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anything about controlling volume via multiplexing. Applicants independent claim read on the basic definition of multiplexer. In fact, Applicants figure 1 only shows potentiometer feeding multiplexer (i.e. item 104 figure 1), which looks just like Malmi multiplexer (item 5 figure 3). Realizing that Rasmusson allows for switch or switches to be used and Malmi improves on volume adjustment by using multiplexer further reduces number of components needed to control volume would have been more than enough motivation to combine.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry W. Taylor, telephone number (571) 272-7509, who is available Monday-Friday, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz, can be reached at (571) 272-7499. The central facsimile phone number for this group is **571-273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2600 receptionist whose telephone number is (571) 272-2600, the 2600 Customer Service telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Centralized Delivery Policy: For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the central fax number (571-273-8300).

Barrý W. Taylor Primary Examiner

Technology Center 2600

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